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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,396	04/27/2001	Rabindranath Dutta	AUS920010108US1	1343

7590 11/16/2004  
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EXAMINER

CHAWAN, SHEELA C

ART UNIT PAPER NUMBER

2625

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/844,396

Applicant(s)

DUTTA ET AL.

Examiner

Sheela C Chawan

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. Applicant's amendment filed on 7/12/04 has been entered.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1- 41 have been considered but are moot in view of the new ground(s) of rejection.

***Drawings***

3. The Examiner has approved drawings filed on 7/12/04.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-41 are rejected under 35 U.S.C. 102(b) as being anticipated by N.G. Bourbakis et al. (Intelligent Assistants for Handicapped People's Independence: Case Study --- IEEE- 7/96).

As to claims 1, 8, 14-16, 23, 29 and 36, N.G. Bourbakis et al. disclose (abstract, lines 3-14) intelligent Assistants for Handicapped People's Independence in which images are captured in a 3-D surrounding environment by the user's command and converted or transcoded into a non-visual or verbal output. The system plays role of human assistant, which describes to the user the 3-D visual environment (section 1, 2.8.1).

Art Unit: 2625

As to claims 2, 9, 17, 24, 30 and 37, N.G.Bourbakis et al. disclose the portable computer as shown in section 2-6 having all the important software tools that make the system function including receiving of depth map or 3-D surrounding environment data.

As to claims 3, 10, 18, 25, 31 and 38, see the rejections of claims 2, 9, 17, 24 and 37 above.

As to claims 4, 11, 19, 26, 32 and 39, N.G.Bourbakis et al. disclose the description of the surrounding scene (depth map) in which each object and its relationship with the other objects in the same scene would be represented by an equation inherently (see section 2.8.1).

As to claims 5, 12, 20, 27, 33 and 40, N.G.Bourbakis et al. disclose the audio output (see section 2.8.1, visual to audio conversion).

As to claim 7, 22 and 35, N.G.Bourbakis et al. disclose the method wherein the transcoding step comprises:

Transcoding a set of adjacent lines within the depth map (see section 2.8, transcoding a set of adjacent lines corresponds to conversion of text reading is done in a line by line manner or raster scanning).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 13, 21, 28, 34 and 41, are rejected under 35 U.S.C. 103(a) as being unpatentable over N.G. Bourbakis et al. (Intelligent Assistants for Handicapped People's Independence: Case Study --- IEEE- 7/96) as applied to claims 1-6, 8-21, 23-34, and 36-41 above and further in view of Lynt et al. (US 5,636,038).

As to claims 6, 13, 21, 28, 34 and 41, N.G.Bourbakis et al. do not expressly disclose that the non-visual output is a tactile output. However, in the same field of endeavor, Lynt et al. disclose a system for converting visual images into tactile representations for use by a person who is visually impaired (see title; abstract and column 1, lines 30-35). Therefore, it would have been obvious to one of ordinary skill in the art to use Lynt et al's teaching to modify the system of N.G.Bourbakis et al. because tactile images are felt by the visually impair person and enable them to ascertain information by touch about the world around them that a sighted person would ascertain through vision (as shown by Lynt et al. at column 1, lines 43 - 46).

**Contact Information**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is 703-305- 4876. The examiner can normally be reached on Monday - Thursday 8 - 6.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 703-308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*See*  
Sheela Chawan  
Patent Examiner  
Group Art Unit 2625  
November 12, 2004